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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,048	04/13/2004	Christopher J. Diorio	6928P010	6115

7590 05/31/2006

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EXAMINER	
BROWN, VERNAL U	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/824,048	DIORIO ET AL.	
	Examiner	Art Unit	
	Vernal U. Brown	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-7,11-20* is/are rejected.

7)☐ Claim(s) *2-4 and 8-10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on March 16, 2006.

Response to Amendment

The examiner has acknowledged the amendment of claims1-3, 5, 6-9, 11, 13-14, 16-17, the addition of claim 20, the new abstract and Title.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim14-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 14-19, it is not clear whether it is the description of the RFID circuit or the RFID circuit been claimed. Claim 14 includes the phrase " machine-readable medium storing a description of a radio frequency identification circuit" but the description of what is store on the machine readable medium is not in the claim, only the description of the RFID circuit is claimed.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-19 are rejected under 35 U.S.C. 101 because descriptive materials are not capable of causing functional change in the computer. The description is not a physical thing, it is neither a computer components or statutory processes, as they are not 'acts" being performed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5, 6, 7, 11-13, and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Hornsby et al. US Patent 6553209 in view of Roesner et al. US Patent 5583819.

Regarding claims 1, 7and 13, the applicant's admitted prior art teaches generating a modulator clock from the calibration value stored within a volatile memory (paragraph 007) and

also teaches generating the demodulator clock signal from a radio-frequency signal received at the RFID tag (paragraph 006). The applicant's admitted prior art is however silent on teaching the modulator clock is generated using a first oscillator, the demodulator clock is generated using a second oscillator and the calibration value is stored in a non-volatile memory. Hornsby et al. in an art related wireless communication system teaches the use of a first oscillator 80 to generate a cock to the receiver including the demodulator (col. 2 lines 55-64) and a second oscillator 82 to generate a clock to the transmit section including the modulator (col. 3 lines 10-17) as illustrated in figure 2. Hornsby et al. is also silent on teaching the calibration value is stored in a non-volatile memory. Roesner et al. in an art related radio frequency tag invention teaches storing of the clock calibration values in a non-volatile memory (col. 11 lines 38-41) so that the calibration value are available after the loss of power.

It would have been obvious to one of ordinary skill in the art for the modulator clock to generated using a first oscillator, the demodulator clock generated using a second oscillator and the clock calibration values is store in a non-volatile memory because using separate oscillator to generate the clock for the modulator and demodulator enables the RFID device to transmit and receive signal at the optimum frequencies and using non-volatile memory instead of volatile memory ensures that the clock calibration information will not be loss after a power interruption.

Regarding claims 5-6, 11-12, the applicant's admitted prior art teaches generating a modulator clock from the calibration value stored within a volatile memory (paragraph 007) and also teaches generating the demodulator clock signal from a radio-frequency signal received at the RFID tag (paragraph 006) but is silent on teaching comparing the recovered clock signal to an oscillator clock signal and storing a value based on the comparison between the recovered

clock and the oscillator clock. Roesner et al. in an art related radio frequency tag invention teaches comparing the recovered clock signal to an oscillator clock signal and storing a value based on the comparison between the recovered clock and the oscillator clock (col. 11 lines 3-41) in order to provide a stable clock for the transfer of reliable data between the tag and its reader.

It would have been obvious to one of ordinary skill in the art to comparing the recovered clock signal to an oscillator clock signal and storing a value based on the comparison between the recovered clock and the oscillator clock because comparing the recovered clock signal to an oscillator clock signal and storing a value based on the comparison between the recovered clock and the oscillator clock provides a stable clock for the transfer of reliable data between the tag and its reader

Regarding claim 20, the applicant's admitted prior art teaches a RFID tag generating a modulator clock from the calibration value stored within a volatile memory (paragraph 007) and also teaches generating the demodulator clock signal from a radio-frequency signal received at the RFID tag (paragraph 006). The applicant's admitted prior art is however silent on teaching the modulator clock is generated using a first oscillator, the demodulator clock is generated using a second oscillator and the calibration value is stored in a non-volatile memory. Hornsby et al. in an art related wireless communication system teaches the use of a first oscillator 80 to generate a cock to the receiver including the demodulator (col. 2 lines 55-64) and a second oscillator 82 to generate a clock to the transmit section including the modulator (col. 3 lines 10-17) as illustrated in figure 2. Hornsby et al. is also silent on teaching the calibration value is stored in a non-volatile memory. Roesner et al. in an art related radio frequency tag invention teaches storing of

the clock calibration values in a non-volatile memory (col. 11 lines 38-41) so that the calibration value are available after the loss of power.

It would have been obvious to one of ordinary skill in the art for the modulator clock to generated using a first oscillator, the demodulator clock generated using a second oscillator and the clock calibration values is store in a non-volatile memory because using separate oscillator to generate the clock for the modulator and demodulator enables the RFID device to transmit and receive signal at the optimum frequencies and using non-volatile memory instead of volatile memory ensures that the clock calibration information will not be loss after a power interruption.

Allowable Subject Matter

Claims 2-4 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2-4 and 8-10, the prior art of record fail to teach or suggests comparing the recovered clock with an oscillator clock generated by the second oscillator.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vernal Brown
May 22, 2006

BRIAN ZIMMERMAN
PRIMARY EXAMINER